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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,300	01/25/2005	Hendrikus Albertus Johanna Looijmans	NL 020689	1501

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EXAMINER	
NGUYEN, LINH THI	
ART UNIT	PAPER NUMBER
2627	

DATE MAILED: 11/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/522,300	LOOIJMANS ET AL.	
	Examiner	Art Unit	
	Linh T. Nguyen	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 September 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12 and 14-20* is/are rejected.

7)☒ Claim(s) *13* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 8-10, and 16 are rejected under 35 U.S.C. 102(b) as being unpatentable by Ota et al (US Patent Number 6009053).

In regards to claims 1 and 9, Ota et al discloses in a method for detecting vibrations in a disc drive apparatus (Fig. 1 element 12) having radially displaceable scan means (Fig. 1, elements 4 and 4s), with a sledge radially displaceable with respect to an apparatus frame (Fig. 1, element PU); and a platform radially displaceable with respect to said sledge (Fig. 1, element 4s is respect to PU); the method comprising the act of detecting a radial displacement of said platform with respect to said sledge (Column 3, lines 36-40).

In regards to claims 2 and 10, Ota et al discloses the method and apparatus according to claim 1, further comprising the act of detecting a back-EMF in an electromagnetic device of the disc drive apparatus in an actuator for displacing said platform with respect to said sledge (Column 3, lines 35-40).

In regards to claim 8, Ota et al discloses the method, further comprising the acts of: selecting an initial rotational speed (Column 4, lines 11-12); detecting a vibration (Fig. 1, element 12); increasing the initial rotational speed if the detected vibration is below an acceptability level (Column 4, lines 21-28); decreasing the initial rotational speed to a previous acceptable rotational speed if the detected vibration is above an acceptability level (Column 4, lines 40-44).

In regards to claim 16, Ota et al discloses an apparatus according to claim 1, wherein said control unit is designed, in an initializing phase, to set the rotation speed of the rotating means at an initial value (Column 4, lines 12-13); to check the amplitude of any vibration of the platform with respect to the sledge (Column 4, lines 17-20); to increase said rotational speed if the intensity of the detected vibration is below an acceptability level (Column 4, lines 21-29); to decrease said rotational speed to a previous acceptable rotational speed if the intensity of the detected vibration is above an acceptability level (Column 4, lines 40-45); to set the operational rotational speed of said rotating means to be equal to said previous acceptable rotational speed (Column 4, lines 45-50) or, if no unacceptable vibration is detected, to be equal to the maximum rotational speed (8x) of the apparatus (Column 4, lines 21-23).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 3-7, 11, 12, 14, 15 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ota et al in view of Seiji (JP Publication 2001067680).

In regards to claims 3 and 11, Ota et al does not but Seiji discloses a method and apparatus further comprising the act of detecting an optical read signal from a detector of the sic drive apparatus and deriving therefrom an X-displacement signal (Paragraph [0035], lines 7-10). At the time of the invention it would have been obvious to a person of ordinary skill in the art to combine Ota et al method to detect a read signal to therefrom derive an X-displacement signal as taught by Seiji et al. The motivation for doing so would have been to operate an actuator controller so as to reduce respective speed (abstract, lines 5-6).

In regards to claims 4 and 12, Ota et al does not but Seiji et al discloses a method, further comprising the acts of: activating an actuator such as to counteract the radial displacement of said platform with respect to said sledge; and detecting an actuator control signal (Paragraph [0035]). At the time of the invention it would have been obvious to a person of ordinary skill in art to combine Ota et al method to detect an actuator control signal as taught by Seiji. The motivation would have been the same as claim 3 above.

In regards to claim 5, Ota et al does not but Seiji et al discloses a method, further comprising the act of filtering (Fig. 1, element 23; Paragraph [0012], lines 1-2) said X-displacement signal (Fig. 1, element 19), in association to a disc rotation frequency (Paragraph [0030], lines 5-8). At the time of the invention it would have been obvious to a person of ordinary skill to combine Ota et al method to detect the X-displacement or actuator control signal respectively to a disc rotation frequency at taught by Seiji et al. The motivation for doing so would have been to accurately detect the signals.

In regards to claims 6 and 14, Ota et al does not but Seiji et al discloses the method according to claim 3, further comprising the act of providing a rectified X-displacement signal, indicating the amplitude of said X-displacement signal (Paragraph [0029]). At the time of the invention it would have been obvious to person of ordinary skill in the art to combine Ota et al method to rectified actuator control signal as taught by Seiji. The motivation for doing so would have been to adjust the signal correctly.

In regards to claims 7 and 17 Ota et al does not but Seiji et al discloses the method and apparatus, wherein the sledge is kept pressed against a frame or a stop fixed to said frame (Fig. 1, element 5). At the time of the invention it would have been obvious to a person of ordinary skill in the art to combine the method of Ota et al to have a sledge against a frame as taught by Seiji et al. The motivation for doing so would have been to create a boundary, therefore, easily stops the sledge.

In regards to claim 15, Ota et al does not but Seiji et al discloses an apparatus, further comprising a control unit for controlling said rotating means; said control unit being responsive to said radial displacement detection means to reduce the speed of said rotating means when said radial displacement detection means indicates that said platform vibrates with respect to said sledge with in excess of a threshold (Column 4, lines 45-50). At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the apparatus of Ota et al to have a control unit to detect the displacement and reduce the speed in respect to a large amplitude as taught by Seiji et al. The motivation would have been to perform a stable pull-in operation even when an external vibration occurs (see abstract).

In regards to claim 18, Ota et al does not but Seiji et al discloses the method, further comprising the act of providing a rectified actuator control signal indicating amplitude of said X-displacement signal (Paragraph [0036]). The motivation is the same as claim 3 above.

In regards to claim 19, Ota et al does not but Seiji et al discloses the method, further comprising the act of providing a command signal to a filter that is configured to perform filtering act, said command signal representing said disc rotation frequency (Paragraph [0037], the filter is within the speed control means). The motivation is the same as claim 5 above.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ota et al in view of Seiji et al as applied to claim 12 above, and further in view of Baba (US Patent Number 5796687).

In regards to claim 20, Ota et al and Seiji et al does not but Baba discloses an apparatus comprising converter (Fig. 1, element 47) configured to rectify said actuator control signal (Fig. 1, element 49). At the time of the invention it would have been obvious to a person of ordinary skill in the are to modify Ota et al and Seiji et al disc drive apparatus to have an A/D converter as suggested by Baba. The motivation for doing so would have been to change the signal to digital.

Allowable Subject Matter

Claim 13 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

In regards to claim 13, **the prior arts made of record neither discloses nor suggests wherein the adaptable filter means having an input receiving a detector output signal; the adaptable filter means further having a command input coupled to receive a signal representing the rotation frequency of said disc to adapt said adaptable filter means, and having an output for providing a filtered detector signal.**

Response to Arguments

Applicant's arguments filed 9/05/06 have been fully considered but they are not persuasive. In regards to claims 1, Applicant argues that Ota et al does not "detect a radial displacement of said platform with respect to said sledge." However, the radial displacement or position is measure by knowing the amount of current or voltage applied to the electromotive force to induce a force of the tracking coil 9. The platform (Fig. 1, elements 9 and 10) is within the sledge (Fig. 1, indicated by the dotted line PU), therefore, the detection of platform has to be with respect to the sledge.

In regards to claim 3, Applicant argues that Seiji does not disclose a detecting of read signal. However, detecting a read signal is basically inherent because the function of a reproducing apparatus first have to form a beam spot on the surface of the disk from the objective lens, then the reflecting light is receive at which the data is read form the disk and further goes to the focus/tracking controller to generate a focus/tracking signal (Paragraph 0014], lines 3-5).

In regards to claim 5, Applicant argues that Seiji does not disclose a filter for the read signal. However, Seiji receive the reflecting light into the photodetector 6, goes into the tracking error signal means, then loops into the tracking actuator which then goes into the reverse electromotive voltage 22 outputs to the speed control 23 (tracking filter inside), therefore, the signal is still process into the filter (Paragraph [0033] and [0037]).

Conclusion

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linh T. Nguyen whose telephone number is 571-272-5513. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, A. Wellington can be reached on 571-272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LN
November 9, 2006

WAYNE YOUNG
SUPERVISORY PATENT EXAMINER